IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A method of determining which, if any, communication protocols can be used to extract status information related to a network device, comprising:

storing, in a device object associated with the network device, protocol specific information obtained from a digital repository for a plurality of communication protocols;

selecting [[a]] any communication protocol among [[a]] the plurality of communication protocols;

obtaining, from [[a]] the device object associated with the network device, the protocol specific information for accessing the network device using the selected communication protocol;

determining if the network device can be accessed using the selected communication protocol and the protocol specific information for accessing the network device obtained from the device object;

if the determining step determines that the network device can not be accessed using the selected communication protocol, removing, from the device object, the protocol specific information for accessing the network device using the selected communication protocol; [[and]]

if the determining step determines that the network device can be accessed using the selected communication protocol, performing further tests to determine whether the selected communication protocol can be used to extract the status information from the network device; and

repeating the selecting, obtaining, determining, removing, and performing steps for each protocol of the plurality of communication protocols.

2. (Currently Amended) The method of claim 1, wherein the step of performing

further tests comprises:

determining whether a vendor of the network device can be obtained from the

network device using the selected communication protocol;

if the preceding determining step determines that the vendor can not be obtained using

the selected communication protocol, checking whether the selected communication protocol

supports a generic vendor, and if the selected communication protocol does not support the

generic vendor, removing, from the device object, the protocol specific information for

accessing the network device using the selected communication protocol;

if the preceding determining step determines that the vendor can be obtained using the

selected communication protocol, obtaining the vendor from the network device and

determining whether the obtained vendor is supported by the selected communication

protocol;

if the obtained vendor is not supported by the selected communication protocol,

checking whether the selected communication protocol supports the generic vendor, and if

the selected communication protocol does not support the generic vendor, removing, from the

device object, the protocol specific information for accessing the network device using the

selected communication protocol; and

if the obtained vendor is supported by the selected communication protocol,

performing further tests related to model information.

3. (Currently Amended) The method of claim 2, wherein the step of performing

further tests related to model information comprises:

determining whether a model of the network device can be obtained from the

network device using the selected communication protocol;

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if the preceding determining step determines that the model can not be obtained using the selected communication protocol, checking whether the selected communication protocol supports a generic model, and if the selected communication protocol does not support the generic model, removing, from the device object, the <u>protocol specific</u> information for accessing the network device using the selected communication protocol;

if the preceding determining step determines that the model can be obtained using the selected communication protocol, obtaining the model from the network device and determining whether the obtained model is supported by the selected communication protocol; and

if the obtained model is not supported by the selected communication protocol, checking whether the selected communication protocol supports the generic model, and if the selected communication protocol does not support the generic model, removing, from the device object, the <u>protocol specific</u> information for accessing the network device using the selected communication protocol.

4. (Original) The method of claim 1, wherein the obtaining step comprises:

obtaining, from the device object, a protocol parameter map comprising at least one entry, wherein each entry comprises a protocol string and a corresponding vector of information used to access the network device using a protocol indicated in the protocol string.

5. (Currently Amended) The method of claim 1, wherein the step of determining if the network device can be accessed comprises:

transmitting, to the network device, the <u>protocol specific</u> information for accessing the network device using the selected communication protocol;

receiving, by the network device, the transmitted protocol specific information; and

determining if the network device responds to the received protocol specific

information indicating that the network device can be accessed using the selected

communication protocol.

6. (Cancelled).

7. (Original) The method of claim 1, wherein the selecting step comprises:

selecting the communication protocol among SNMP, HTTP, and FTP.

8. (Original) The method of claim 1, wherein the step of performing further tests

comprises:

checking whether the selected communication protocol is SNMP,

wherein, if the checking step determines that the selected communication protocol is

SNMP, the selected communication protocol can be used to extract the status information

from the network device.

9. (Currently Amended) A monitoring computer including a processor configured to

determine which, if any, communication protocols can be used to extract status information

related to a network device, comprising:

means for storing, in a device object associated with the network device, protocol

specific information obtained from a digital repository for a plurality of communication

protocols;

means for selecting [[a]] any communication protocol among [[a]] the plurality of

communication protocols;

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means for obtaining, from [[a]] the device object associated with the network device,

the protocol specific information for accessing the network device using the selected

communication protocol;

means for determining if the network device can be accessed using the selected

communication protocol and the protocol specific information for accessing the network

device obtained from the device object;

means for removing, from the device object, the protocol specific information for

accessing the network device using the selected communication protocol, when the means for

determining determines that the network device can not be accessed using the selected

communication protocol; [[and]]

means for performing further tests to determine whether the selected communication

protocol can be used to extract the status information from the network device, when the

means for determining determines that the network device can be accessed using the selected

communication protocol, and

means for repeating the selecting, obtaining, determining, removing, and performing

for each protocol of the plurality of communication protocols.

10. (Currently Amended) The monitoring computer of claim 9, wherein the means

for performing further tests comprises:

means for determining whether a vendor of the network device can be obtained from

the network device using the selected communication protocol;

means for checking whether the selected communication protocol supports a generic

vendor, when the means for determining determines that the vendor can not be obtained using

the selected communication protocol, and means for removing, from the device object, the

protocol specific information for accessing the network device using the selected

communication protocol, when the selected communication protocol does not support the generic vendor;

means for obtaining the vendor from the network device and means for determining whether the obtained vendor is supported by the selected communication protocol, when the means for determining determines that the vendor can be obtained using the selected communication protocol;

means for checking whether the selected communication protocol supports the generic vendor, when the obtained vendor is not supported by the selected communication protocol, and means for removing, from the device object, the protocol specific information for accessing the network device using the selected communication protocol, when the obtained vendor is not supported by the selected communication protocol; and

means for performing further tests related to model information, when the obtained vendor is supported by the selected communication protocol.

11. (Currently Amended) The monitoring computer of claim 10, wherein the means for performing further tests related to model information comprises:

means for determining whether a model of the network device can be obtained from the network device using the selected communication protocol;

means for checking whether the selected communication protocol supports a generic model, when the means for determining determines that the model can not be obtained using the selected communication protocol, and means for removing, from the device object, the protocol specific information for accessing the network device using the selected communication protocol, when the selected communication protocol does not support the generic model;

means for obtaining the model from the network device and means for determining

whether the obtained model is supported by the selected communication protocol, when the

means for determining determines that the model can be obtained using the selected

communication protocol; and

means for checking whether the selected communication protocol supports the generic

model, when the obtained model is not supported by the selected communication protocol,

and means for removing, from the device object, the <u>protocol specific</u> information for

accessing the network device using the selected communication protocol, when the obtained

model is not supported by the selected communication protocol.

12. (Previously Presented) The monitoring computer of claim 9, wherein the means

for obtaining comprises:

means for obtaining, from the device object, a protocol parameter map comprising at

least one entry, wherein each entry comprises a protocol string and a corresponding vector of

information used to access the network device using a protocol indicated in the protocol

string.

13. (Currently Amended) The monitoring computer of claim 9, wherein the means

for determining if the network device can be accessed comprises:

means for transmitting, to the network device, the <u>protocol specific</u> information for

accessing the network device using the selected communication protocol;

means for receiving, by the network device, the transmitted <u>protocol specific</u>

information; and

means for determining if the network device responds to the received <u>protocol</u>

<u>specific</u> information indicating that the network device can be accessed using the selected

communication protocol.

14. (Previously Presented) The monitoring computer of claim 9, wherein the means

for selecting comprises:

means for selecting the communication protocol among SNMP, HTTP, and FTP.

15. (Previously Presented) The monitoring computer of claim 9, wherein the means

for performing further tests comprises:

means for checking whether the selected communication protocol is SNMP,

wherein, if the means for checking determines that the selected communication

protocol is SNMP, the selected communication protocol can be used to extract the status

information from the network device.

16. (Currently Amended) A computer program product ~~having~~ <u>including</u> a computer

readable medium <u>having embedded therein instructions, which when executed by a</u>

<u>processor, cause the processor to perform a method</u> for determining which, if any,

communication protocols can be used to extract status information related to a network

device, comprising:

<u>instructions for storing, in a device object associated with the network device,</u>

<u>protocol specific information obtained from a digital repository for a plurality of</u>

<u>communication protocols;</u>

instructions for selecting [[a]] <u>any</u> communication protocol among [[a]] <u>the</u> plurality

of communication protocols;

instructions for obtaining, from [[a]] the device object associated with the network

device, the protocol specific information for accessing the network device using the selected

communication protocol;

instructions for determining if the network device can be accessed using the selected

communication protocol and the protocol specific information for accessing the network

device obtained from the device object;

instructions for removing, from the device object, the protocol-specific information

for accessing the network device using the selected communication protocol, when the

instructions for determining determine that the network device can not be accessed using the

selected communication protocol; [[and]]

instructions for performing further tests to determine whether the selected

communication protocol can be used to extract the status information from the network

device, when the instructions for determining determine that the network device can be

accessed using the selected communication protocol, and

instructions for repeating the instructions for selecting, instructions for obtaining,

instructions for determining, instructions for removing, and instructions for performing for

each protocol of the plurality of communication protocols.

17. (Currently Amended) The computer program product of claim 16, wherein the

instructions for performing further tests comprise:

instructions for determining whether a vendor of the network device can be obtained

from the network device using the selected communication protocol;

instructions for checking whether the selected communication protocol supports a

generic vendor, when the instructions for determining determine that the vendor can not be

obtained using the selected communication protocol, and instructions for removing, from the

device object, the <u>protocol specific</u> information for accessing the network device using the

selected communication protocol, when the selected communication protocol does not

support the generic vendor;

instructions for obtaining the vendor from the network device and instructions for

determining whether the obtained vendor is supported by the selected communication

protocol, when the instructions for determining determine that the vendor can be obtained

using the selected communication protocol;

instructions for checking whether the selected communication protocol supports the

generic vendor, when the obtained vendor is not supported by the selected communication

protocol, and instructions for removing, from the device object, the <u>protocol specific</u>

information for accessing the network device using the selected communication protocol,

when the selected communication protocol does not support the generic vendor; and

instructions for performing further tests related to model information, when the

obtained vendor is supported by the selected communication protocol.

18. (Currently Amended) The computer program product of claim 17, wherein the

instructions for performing further tests related to model information comprise:

instructions for determining whether a model of the network device can be obtained

from the network device using the selected communication protocol;

instructions for checking whether the selected communication protocol supports a

generic model, when the instructions for determining step determine that the model can not

be obtained using the selected communication protocol, and instructions for removing, from

the device object, the <u>protocol specific</u> information for accessing the network device using

the selected communication protocol, when the selected communication protocol does not

support the generic model;

instructions for obtaining the model from the network device and instructions for

determining whether the obtained model is supported by the selected communication

protocol, when the instructions for determining [[step]] determine that the model can be

obtained using the selected communication protocol; and

instructions for checking whether the selected communication protocol supports the

generic model, when the obtained model is not supported by the selected communication

protocol, and instructions for removing, from the device object, the <u>protocol specific</u>

information for accessing the network device using the selected communication protocol,

when the selected communication protocol does not support the generic model.

19. (Original) The computer program product of claim 16, wherein the instructions

for obtaining comprise:

instructions for obtaining, from the device object, a protocol parameter map

comprising at least one entry, wherein each entry comprises a protocol string and a

corresponding vector of information used to access the network device using a protocol

indicated in the protocol string.

20. (Currently Amended) The computer program product of claim 16, wherein the

instructions for determining if the network device can be accessed comprise:

instructions for transmitting, to the network device, the <u>protocol specific</u> information

for accessing the network device using the selected communication protocol;

instructions for receiving, by the network device, the transmitted <u>protocol specific</u>

information; and

instructions for determining if the network device responds to the received <u>protocol specific</u> information indicating that the network device can be accessed using the selected communication protocol.

21. (Cancelled).

22. (Original) The computer program product of claim 16, wherein the instructions for selecting comprise:

instructions for selecting the communication protocol among SNMP, HTTP, and FTP.

23. (Original) The computer program product of claim 16, wherein the instructions for performing further tests comprise:

instructions for checking whether the selected communication protocol is SNMP,

wherein if the instructions for checking determine that the selected communication protocol is SNMP, the selected communication protocol can be used to extract the status information from the network device.

24. (Currently Amended) The method of claim 1, wherein the step of determining if the network device can be accessed comprises:

determining if the network device can be accessed by a monitoring computer using the selected communication protocol and the <u>protocol specific</u> information for accessing the network device obtained from the device object.

25. (Currently Amended) The monitoring computer of claim 9, wherein the means for determining determines if the network device can be accessed by the monitoring

computer using the selected communication protocol and the <u>protocol specific</u> information

for accessing the network device obtained from the device object.

26. (Currently Amended) The computer program product of claim 16, wherein the

instructions for determining comprises:

instructions for determining if the network device can be accessed by a monitoring

computer using the selected communication protocol and the <u>protocol specific</u> information

for accessing the network device obtained from the device object.